

Hydroacoustic and Underwater Videographic Survey of San Juan County Eelgrass Resources

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The Friends of the San Juans, the San Juan County Marine Resources Committee, the Washington State Departments of Natural Resources and Fish and Wildlife, and the University of Washington developed a comprehensive multi-phased project to assess and evaluate nearshore marine habitat, including eelgrass (*Zostera marina*), throughout San Juan county. From May through September 2003 we surveyed the entire shoreline using hydroacoustic and underwater videographic methods. Our objectives were to map the deepwater edge of any eelgrass beds and to estimate the mean maximum depth limit of growth along every 1000 m section of shoreline. Mean maximum eelgrass depth for 1000 m shoreline sections ranged from -2.7 ft to -29.8 ft and the weighted average was -18.7 ft (MLLW). This study was the first to map the deepwater edge of eelgrass within San Juan County, and data are being used to augment ongoing studies to evaluate change analysis of cover at selected sites. An important finding was a large, previously unreported, eelgrass bed located along the southern shore of San Juan Island that extends south to the Salmon Bank buoy. This project provides a baseline for the landscape analysis necessary to conserve and protect eelgrass resources in San Juan County.